

DECONSTRUCTION in the DEPARTMENT of the ARMY

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Aberdeen Proving Ground (APG) is piloting a deconstruction project to return valuable building materials and other useful items to the community, rather than sending them to a landfill. Deconstruction is the dismantling of a building in the opposite order in which it was built so that its component parts can be segregated for reuse. Two buildings will be deconstructed in 1998 as part of the pilot project.

Federal and Army requirements regarding pollution prevention and recycling have helped generate a renewed interest in deconstruction within the Army. Deconstruction is not a new idea for APG, however. From the 1960s to the 1980s, APG routinely sold components of buildings and buildings in their entirety to members of the community. Unfortunately, in the mid-1980s, an individual was injured while dismantling a building, so the project was halted out of concern for public safety. In recent years, approximately one-fifth of all non-hazardous solid wastes at APG comes from construction and demolition debris.

The Directorate of Safety, Health and Environment (DSHE) has modeled the APG deconstruction pilot project after other successful programs at Fort Ord in Marina, CA, Fort McCoy in Wisconsin, and Fort Knox in Kentucky. The APG Deconstruction Team consists of DSHE, the Directorate of Public Works, and the Testing and Evaluation Command Legal Office.

The greatest benefit to deconstruction is improved community relations. Returning taxpayer-purchased resources to the community is the greatest reward. The second benefit is the reduction in wastes. Fort McCoy boasts an 85 percent reduction in landfilled wastes from their deconstruction effort. The third benefit is the cost savings. The types of structures APG plans to deconstruct currently cost approximately fifteen dollars per square foot to demolish in the traditional fashion. Based on the experiences of Forts McCoy and Knox, APG hopes to reduce that cost by up to 86 percent through deconstruction. For the two buildings available for deconstruction through this pilot project, savings of up to \$77,000 are possible.

The three major challenges to this project have been the coordination, learning the requirements, and finding bidders. Conducting a pilot project can be fun and exciting, but it can also be difficult and frustrating without the right recipe of team members. Relying heavily on the experiences of our counterparts at the other installations, APG pulled in the appropriate personnel for its internal team. This group meets every two weeks to discuss the status of the deconstruction and demolition projects.

Early on, team members compiled their program requirements, to include site safety, environmental and historical review, and legal parameters. These requirements guided the development of the contract - - and the foundation of the project actually rests on these requirements. For instance, the removal of all asbestos is the responsibility of the post. Another example of a program requirement is that the purchaser must follow OSHA requirements for demolition site safety.

Quotes were solicited by phone to specific vendors of salvaged wood in the beginning of June. During the second week of June, a request for quotes was published in local and state-wide newspapers, with the last publication date being June 27. The Directorate of Contracting sends any interested parties the quote package, including the statement of work and draft contract. Before the final quotes are submitted, one site visit will be scheduled for all interested parties. APG expects to accept and award the contract by the end of July, depending on any negotiations that may take place between the installation and any bidders. The deconstruction will likely begin in early August and be completed within 60 days. Thus far, we have received four calls for further information from potential bidders.

If the pilot project is successful, APG will propose to sell more of the thirteen other buildings eligible for deconstruction in order to return these valuable resources to the community, reduce the impact of demolition on our landfills, and save money.